

Serial No.: 10/628,692
Art Unit: 1651

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (Currently amended) A bone repair material, comprising:

a porous, resorbable particulate derived of anorganic bone mineral or natural bone-like-mineral bone derived material or synthetic hydroxyapatite in a concentration of at least about 50 weight percent of said material; and

a resorbable carrier gel component for suspending said particulate, forming a putty-like formulation, for placing in a bony defect, said gel component having a sufficiently high molecular weight and concentration in the putty wherein ~~concentration of the~~ particulate-material is sufficiently high such that bone repair is facilitated while migration and expansion of said material particulate is minimized.

Claim 2. (Original) The bone repair material of claim 1 wherein said resorbable particulate is bovine derived having a particle size range of 250 to 1000 μm .

Claim 3. (Original) The bone repair material of claim 1 wherein said resorbable particulate is a porous hydroxyapatite derived from lime-containing algae, having a particle size range of 300-1000 μm .

Claim 4. (Original) The bone repair material of claim 1, wherein said carrier gel component comprises a polysaccharide.

Claim 5. (Currently amended) The bone repair material of claim 4, wherein said carrier material gel component is hyaluronic acid or its derivatives, or hydroxylpropyl cellulose or mixtures thereof.

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Claim 6. (Original) The bone repair material of claim 5, wherein said carrier gel component is hyaluronic acid or its derivatives having a molecular weight of $0.7-2.0 \times 10^6$ daltons and a final concentration of 45-64 mg/cc in the putty.

Claim 7. (Currently amended) The bone repair material of claim 1, further comprising a at least one P-15 synthetic biomimetic, polypeptide sequence of Type I collagen, having at least one of the poly-peptide sequences as claimed in U.S. Pat. No. 5,635,482, bound to said particulate.

Claim 8. (Currently amended) A bone repair material for dental bone repair procedures, comprising:

a porous, synthetic, resorbable, bone-like hydroxyapatite or anorganic bone derived particulate, in an amount of at least about 30-75 50 weight percent of said material; and

a hyaluronic acid gel in an amount of about 25-70 weight percent of said material, wherein said material is a moldable, cohesive putty for application to bony defects; said amount of particulate present dependent upon its density.

Claim 9. (Currently amended) The bone repair material of claim ~~7~~ claim 8, wherein said particulate has a bulk density of 1.1 to 1.3 g/cc and the putty composition comprises about 50-60 weight percent particulate and about 40-50 weight percent hyaluronic acid gel.

Claim 10. (Currently amended) The bone repair material of claim ~~7~~ claim 8, wherein said bone repair material comprises about 55 weight percent particulate and about 45 weight percent hyaluronic acid gel.

Claim 11. (Currently amended) The bone repair material of claim ~~7~~ claim 8, wherein said particulate has a bulk density of 0.45 to 0.65 g/cc and the putty composition comprises 35-40 about 55 weight percent particulate and 60-65 about 45 weight percent hyaluronic acid.

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Claim 12. (Currently amended) The bone repair graft material of claim 4, wherein said carrier is a hydroxylpropyl cellulose or methyl cellulose gel forming a moldable, cohesive putty.

Claim 13. (Currently amended) The bone repair material of claim 8 further comprising at least one of a P-15 polypeptide sequence of collagen as ~~claimed in U.S. Pat. No. 5,635,462~~, bound to xenogenic bone mineral particulate of about 200-500 nm in diameter, suspended in said gel carrier, said material having a putty-like consistency.

Claim 14. (Currently amended) The bone repair material of claim 3 further comprising at least one of a P-15 polypeptide sequence of collagen as ~~claimed in U.S. Pat. No. 5,635,462~~ and continuations thereof, bound to porous hydroxyapatite derived from lime containing algae of about 300-1000 µm in diameter suspended in hydroxylpropyl cellulose or hyaluronic gel carrier, said material having a putty-like consistency.

Claims 15-18 (Canceled).

Claim 19. (Currently amended) The bone repair material of claim 7, wherein the concentration of ~~PEPGEN-P-15~~ P-15 synthetic biomimetic, polypeptide sequence of Type I collagen in the putty is at least about 800 mg/cc.

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